

Interview with Eric Newman, likely April 21, 2006, discussing the Newman Money Museum exhibits on Benjamin Franklin and Continental Dollars.

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History of Money  
Disk: E5

ERIC: In 2006, the 300<sup>th</sup> anniversary of the birth of Franklin is being celebrated and one of the ways it is being celebrated is by the United States Mint putting out a special one-dollar coin for the birthday celebration and instead of putting out this one-dollar coin, they put out several. These are rather lovely from an artist and historical point of view. They have one... one of the one-dollar coins, which on the obverse had Franklin flying a kite. It is not the kite he drew electricity from the clouds with; this is his general ability to fly kites which was demonstrated over and over again particularly by going swimming; which he was an expert swimmer, and attaching a kite to his body and being pulled across a lake by his kite string while flying a kite; he exercised not at all in doing that. This shows him on land; handling kites, which ended up with the electricity experiment using a cotton line that was wet to carry the electricity to a piece of metal which he hung on his kite. Then on the reverse of this, it has Franklin symbol that he used on his newspaper of a snake cut into thirteen pieces and the motto on it, "Join or die". That was because of all of the arguments between the various states and each one had a different agenda to what they wanted to do. So, that insignia is on there and it is fascinating.

Then the other type of coin... the other type of dollar coin, the same series and part of the same set was... it had an obverse which has the bust of Franklin and the 300<sup>th</sup> anniversary and showed that it is        and gives the dates of this birth on the anniversary and this is a piece of his face, whole face and his signature on the obverse. And on the reverse, it is most unusual because it carries an image of the continental dollar of which was issued in 1776. We have not planned to show one of those, but we can. We have... most of them were made out of pewter and a couple of them were made out of silver and a couple made out of copper. This dollar is called "Continental Currency" and the reverse of this dollar has the Franklin motto of the sun shining on a sundial and then the expression, Fugio, which means "I Fly" indicating that the sun is shining on the sundial as time flies and therefore "mind your business", is on the coin. Oh, they don't... Yes, that is a consolidation of one of his mottos is Poor Richard's Almanac. So, this reverse also has on it, EG FECIT, which I had the pleasure of being able to figure out who EG was and I wrote that up many years ago. Elisha Gallaudet, the cousin of a man who developed the training of the deaf. This was a cousin who stayed in New York. He was an engraver and when the British, during the Revolutionary War took over New York, he moved to New Jersey, but he was one of the last people to get out. He had made these Continental dollars and they are very, very intriguing. This celebration....

SUE: What does F-E-C-I-T mean?

ERIC: Huh?

SUE: What is the F-E-C-I-T?

ERIC: F-E-C-I-T means “he made it” in Latin. So, E-G, Elisha Gallaudet made it.

SUE: Okay.

ERIC: And that is customary for a sculptor or an engraver to put FECIT or sometimes they put SL or SC indicating the sculptor of the item. But usually, the FECIT is more common and it is a standard procedure.

SUE: Okay.

ERIC: So, I think that will be of interest to the... Now we will show a National Bank note of ten-dollars, second series, which has the famous electricity experiment and shows Franklin flying a kite with the cloud giving an electric charge to the kite string and he is doing this in front of a young boy to demonstrate that to the young boy.

SUE: About when was that, Eric?

ERIC: That would be usually 1882 to about 1890 something.

SUE: Okay.

ERIC: So, that will be shown on the National Bank Note. Then, the French government was delighted to put out a commemorative coin in honor of Franklin’s 300<sup>th</sup> birthday and they put on their coin, AMI DE LA FRANCE, “Friend of France”, which of course he was because of when he went during the American Revolution and stayed in France, that was his continuation of ... he lived in Possy, and everybody in Europe came to see him while he was there as Minister Plenipotentiary from the United States of America because they had declared their independence. So, he was a rather untouchable and arranging loans from France, Spain and Holland to the United States and absolutely captivating all of the women of Europe and all of the Statesmen; even people from England would come to see him while he was in France, even though they were at war and that wouldn’t bother....

[Phone Ringing]

SUE: Let me get your phone.

ERIC: Molly?

SUE: It’s Molly.

ERIC: Okay.

ERIC: Now, we will go on with Franklin. These are in various order.

SUE: Okay.


ERIC: On the bank notes issued by the various banks throughout the United States and those would be issued under state charter by each bank, they often selected somebody important to put on the bank note, which is an engraved section and Franklin's portrait was very commonly used. It would have nothing to do with the bank other than decoration. We will put on display various portraits as engraved by the artist in the 1820s, 30s, 40s and so that will be a part of the exhibit. Now, then there were some issuers of money that were named after Franklin. And we will show, for example, the Franklin Bank, which was in Boston. We will show an 1836 ten-dollar note which has his portrait in center and of course, the name of the bank, the Franklin Bank and then we'll have the Franklin Loan Company, which was in Philadelphia and this would have his portrait on it and the loan company would have small denominations, this is a twenty-cent note issued from their office at that time. This was part of the panic of 1837 when a great deal of paper money was issued because of the specie panic had driven all of that out of circulation. One of the most delightful issues of paper money with Franklin's portrait is the United States Note with Franklin's portrait on it. The note that I have in my hand is series of 1880, fifty-dollar piece and so that was very well known; that portrait of him and it has continued ever since. He has always been on the fifty-dollar notes, of the National Bank notes and others, and we will show many of those. He has also been on the hundred dollar Federal Reserve notes beginning in when the Federal Reserve first came out. Those were both the large size notes prior to 1928 and the smaller size notes of the later period out to the present time. He is respected with respect to the prominence in United States history. He was used on the half dollars of the United States from 1948 through 1963 and so, those were made of silver. Those are out of circulation. Another very famous Franklin item was a token issued in England called the Franklin Press Cent; penny. This said, "Payable at the Franklin Press in London". That would be an advertising half penny or penny token issued in London and the reason that it is so important is because it has an illustration of the Franklin Press. The Franklin Press is an improvement on the printing press that Franklin developed in the course of his lifetime and had an enormous handle which operated a screw press which turned down the platen that was held by the press and pressed that platen against the ink frame below and that would, with the paper in between, transfer the ink from the type face the item being printed. He had that... that would be operated by a horizontal swing of the screw press and he improved that so that it could be done very fast. Of course, they could only do half of the one face of the sheet at a time and then it would have to be put up on wires or dried so that you could print on the other side only after it had dried sufficiently. One of the items we will show is a colonial printing of the money of Pennsylvania. This is 1775; in other words, this is issued just prior to the American Revolution of which is the money of Pennsylvania and there are 16 pieces of money printed on this sheet. The method of printing was very ingenious. The 8-pieces would have a face on the money on one part of the printing frame and the other part of the printing frame would have 8-

pieces of the back of the money so that you were printing on one face, 8-faces and 8-backs and then flip this and turn it over so that after it dried you could print the backs on where the fronts were and the fronts on where the backs were, so that you would end up with a completed piece of money, 8 of them facing one way and 8 of them facing the other. That was a very interesting trick in printing because in order to get the front and back in register so that they were right on top of one another, you would have two pins in the printing chase sticking vertically upward at two opposite ends of the gutter on the printed sheet and you would press those pins; and press the paper down over the pins. Then after the sheet was dry, then you would turn it over and put the holes that they made in the paper back on those same pins so that it ends up in exactly the same position as before and therefore, and then you would cut the items out of the machine with a knife or scissors or something of that sort after they were signed and numbered and ready to be issued. This was done in 1775 by the printing firm that Franklin had founded, but he had dropped out before. Originally, there was just Benjamin Franklin who printed money. We will talk about that afterwards. And then, around 1744, he took his friend and printing associate and said you run the business, we've printed our newspapers and our pamphlets and almanacs and all of that, and we've made a lot of money... Franklin made a great deal of money doing that.... And the firm became Franklin and Hall. And then Franklin decided he didn't want his name in it at all and they changed the name to Hall and Sellers. Then they were able to work for the government and print the Continental Currency for the government and Franklin's name would not be on it, even though they were using his printing type and they were using some of his emblems and mottos and his borders, as well as his leaf designs.

Now, well... I already told you about.... Now I want to talk to you a little longer about his money printing.

SUE: Sure.

ERIC: At the age of 23, He had been trained in printing already and had been to Europe and wanted to get the contract to print the money in Pennsylvania. He had no way of using influence of anything like that to do it, so he decided that there was an argument about whether Pennsylvania should issue paper money and he wrote a modest inquiry into the necessity for our paper money. It was the most remarkable presentation by a young man on an economic subject that had been discussed and argued by everybody in the world and this was the most logical effort to show how bad barter was and that barter costs so much money and didn't allow economic expansion and that paper did. Paper money had been issued before he undertook this promotion, but then the paper money in the beginning in the American colonies was based on tax redemption. Paper money had been issued, let us say, for 10-years and a tax would be made for one-tenth of that amount every year and therefore they would redeem 10-percent of the paper money every year and it would all be gone at the end of the ten years; paid for by the tax paper and therefore the government wouldn't owe any money and everybody was sure that his money was good because he could always use it to pay his taxes. They would issue these new tax period pieces of paper money and this is what he supported and showed how marvelous this system was. Nobody was even able to answer Franklin on any of his

economic theories because he wrote them so well. Then he had a tremendous problem of counterfeiting. Counterfeiting of paper money that he printed and then anybody else would print for any of the other colonies would have the detriment that it was made out of printed type and that type could be bought in England and used... it would be the same type as they bought for the paper money, but they had border designs and arms and insignia of various kinds that were cut out by an artist and so Franklin decided he would do that too. He would cut and design and he tried to make them as complicated so that nobody could copy them. And then he began to think, how could I produce something that nobody could copy? While he was in England in the early 1730s, there was a contest in England to see whether stereotyping could be done for printing anything. Now by stereotyping in the old days meant that one you set a page or a book or an item in type, you would have all lose type in this. And you would type that up with wood and block for that item. Now, when you made a book, you used up an enormous quantity of type and if you didn't know how many of that book you were going to sell, you had to retain the type. Let's say you printed up a hundred or two hundred copies and your sales, you got them sold and you wanted to get some more, the only thing you could do was to keep the original type locked up in racks and then use that over again to print more books. The idea was isn't there away to make a stereotype, in other words a copy of the type so that you could free all of this type to be used again? Otherwise, you had to buy more and more and more type because as you stored more books, you'd have to buy more type. So, in England there was a contest to see who could make a stereotype. And the way you made a stereotype was to put plaster over the set-type and that would give you an image of the whole page and then if you could pour led in to that plaster you would get a solid piece of the page and if that could be used for printing, then you'd release all of the original type and it could be used over and over again. Everybody tried to do it. A fellow in Scotland, by the name of William Gede, was able to produce a book in Latin, , and he said that he broke so many plasters while doing it that it was an impossible method of reproducing. Well all you had to do was tell Franklin that something was impossible and Franklin began thinking. He was more interested in; he saw all the things that they tried to do to make this stereotype. He wasn't printing that many books that a stereotype was what he wanted. He wanted to be able to make an image that nobody could copy. So, he began to think and he realized that if he could take a leaf or two leaves and put those; lay them down on something and take a plaster image of those leaves and then he could have a piece of led that he could print from to put on paper money. He knew that by his study of nature that every leaf was different, like a finger print and their edges were all very, very complicated and that nobody could copy a leaf and all of its veins, so he determined. I've got to find a way to take a led image of a leaf. So, always the plasters would break. He would take a leaf; lay it on a wet paper meshay or on a block of wood or something and pour plaster over it and let the plaster dry, but then when he poured led in to the plaster, the plaster would break and then he couldn't get a led image. So he began to think why is this breaking? and he realized that there was an expansion of the plaster when the hot led was put on it, the heat would expand it and pop it. So, then he realized, that one of the reasons for popping was because the water, the amount of water that was in the plaster... maybe he could dry out the plaster and not have any water. Well, that didn't work very well. So, then he conceived the idea that maybe he could get something that didn't expand and then he found out that if you use

brick dust; it does not expand or contract and also mica is also a mineral that you can mix into plaster and it doesn't expand or contract. So, by putting in brick dust and putting in mica and by drying the plaster and using it in as dry of form as he could, he learned to make an image in plaster that wouldn't break when led got poured on it. So, he invented the process of nature printing in 1836 and put a piece of that in to his Poor Richard's Almanac, a piece of golden rod. He invented one of the most complicated items imaginable and he knew he better keep still and he kept it a secret. He later told a couple of American printers how to do it, but it was never known anywhere else in the United States or in the world. It wasn't reinvented for almost a hundred years, over a hundred years after he had invented it. Nobody knew what was done. We had to reinvent what Franklin did because he kept it so secret. We undertook that project with what he had and that he invented nature printing.

Nature printing was thought of by him because his friend, [REDACTED], was printing leaves for a botanist. He would take a leaf or several leaves and put ink on the leaves themselves and press them between two pieces of paper and pick up the image on both sides by pressing these two pieces together. Leonardo De Vinci had invented that in the 15<sup>th</sup> Century, so that they knew and [REDACTED], being a Botanist was able to create a book with printed leaves to circulate among those botanists who wanted to study the different varieties of leaves. Franklin immediately realized that that was no good because when you used a real leaf, you could only make about seven or eight impressions and then you'd have to get a new leaf. He wanted to get an impression that he could continue to print and that is why he invented the plaster transfer to lead and it didn't seem possible that anyone would have that much guts to invent something. Here, so you can see some of the leaf images that he printed.... Look at this. And then he put a piece of cloth in back of the leaf.

SUE: Counterfeit is depth. Those are neat. Fascinating; an amazing process.

ERIC: Here, we will show all of these different items. Here is a... this is when Franklin was... this is my nature printing 1964, I reinvented that. Nobody had ever heard of it. Here is a piece of Franklin's printing that is unsigned. We will show that as a normal Franklin item. We are going to show the Fugio cent, which is 1787 the first coin minted by the United States. It was minted privately. This has Franklin's design and with a Fugio, "Mind your business" and the sundial and that coin is the first copper piece issued by the United States. We will also show during the Civil War period, Franklin had his picture on the one-cent postage stamp so in 1862 they made a coin with a one-cent postage stamp in it. It was to circulate because they didn't have enough coins. Then during the Civil War, a special Benjamin Franklin coin was also issued for circulation. Now these...

Franklin was responsible for the development of the Bank of North America, which is incorporated by the Continental Congress in 1781 and this issued paper money. We will have to show... it says this is in the safe deposit box. So, we will show a piece of the early paper money after the United States had one the Revolutionary War. I haven't seen some of these in ages.

Franklin also got contracts to print the money from Delaware and from New Jersey. He used his nature prints with respect to each one of those. At the end of the Revolutionary War, in celebrating the victory in 1783 and the Treaty of Peace with England, Franklin commissioned an artist by the name of Dupré to make a medal in honor of the American victory. This medal should be shown because it is very attractive and will give much more detail on that. I haven't seen a lot of this...

One of the wonderful things that Franklin did under his Will was the Boston School Award, which is he left a fund of money to give every student in Boston who had an exemplary record of accomplishment, a medal to stimulate their scholastic opportunities. These school medals are still given to this day out of the fund that he established.

SUE: Really?

ERIC: Usually, a different type of medal is given out most every year and this is John Hill's 1810. Kids often put a hole in the metal and put it around their neck and show that they had been honored by getting a school medal. I have two of those. I haven't seen these in years.

I find another one of these beautiful Franklin portraits. Franklin setting type; in other words he was picking type from the upper and lower case where type was held in the inside. This is Franklin up against the box from which he selected type as he held a holder to pick up the type that he was setting.

SUE: You know, I never knew why they called it upper case and lower case. No I do.

ERIC: Now you do. You didn't know?

SUE: I didn't know this. The capitals are in the upper case and the others are in the lower case. I didn't know why they called it that.

ERIC: Well, that is the reason. They would put the type back in that position after it was used and he picked the upper case and the lower case to set the type in... and now you know. You gotta know everything when you get in to coins.

SUE: I guess so. I'm telling you.

ERIC: This is fun. So everything scholarly as blamed on Franklin and here is one of his famous comments, look at the top caption: "The art of making money plenty". The interesting part of that, when he was asked in 1736, when he was printing New Jersey money, they said what are you doing? He said, I am making money more plentiful. So, later they got a little more confused as to what he had said and written and so in order to have fun for school children, they invented these so called pictographs of symbols so... what do you call those?

SUE: These were for school kids?

ERIC: Yeah.

SUE: Those are really neat.

ERIC: Those helped children learn to read by having objects they could interpret the object. You would have these to help them read particularly in the one room school house when they were teaching one group of kids, three or four others in another group, the different grades would have things like this to read and study and this would help them to learn to read. The art of making money plenty never ... "In Every Mans Pocket" By Dr. Franklin. But this wasn't developed until about 1815. So it was long after Franklin was gone but they used him for teaching english to children.

SUE: That is a wonderful thing.

ERIC: Oh yeah.

SUE: It's sort of hard to imagine that these were printed by him.

ERIC: Now the... let's see, I'm trying to figure out... I don't know what these are. Oh, these are pictures of all of this stuff. Now, one of the most amazing things about Franklin is that when the designs for the Continental Currency in 1775 had to be selected, Franklin determined that he could find good mottos to put on the money and that some of the mottos could be found in his library. I never, I always wondered where he got these particular ones. A friend in mine in Philadelphia, my goodness this library is being reassembled and we now know what books he had. His library was sold after he died by his family because his grandson died and you know... for years, they had been buying back the books. How did they know they were his books? He put an initial in the back of the book to show where it went on his shelf. He put A-B-C from the author and so this was a wonderful experience to be able to shelve his books and know what was there. We were able to find out from this what books he had. So, my friends said I'll look through the emblem and motto books for me and I gave him the emblems and mottos on the pieces of paper money and he starts to look and the one book is what's called, [REDACTED], this book enabled him... look here..... to pick out a latin motto in a picture. He could choose whichever ones he wanted to from these books and he did do the ones that were effective. It says there are 400 emblems and mottos. God knows where... I lost the one... I wanted to show you this because it is so interesting.

SUE: Were books like that with emblems and mottos common at that time?

ERIC: They published these in Germany and in Holland and they are about over a century, 15-1600. You see, because of armory and code of arms they wanted all kinds of symbols on [REDACTED] and so people began to draw things depending on your victory or what you were doing. I'm trying to find.... Well, I won't bother looking for it. We'll find it. He copied out of here the Latin and the picture for the emblems on the paper money for



the United States. All I did was get my friend to look in these books for me and there... this is a tremendous period of art and symbolism. In other words, it would be after the storm there would be storm light and struggle against your enemy and every kind of do good and all the mottos and they'd have an illustration of that. I'm showing the money and the book that it came from. This is a book bound in sheep skin. This is vellum, where they take the skin and wax it and bind a book. Just look at this book for being 400 years old? And look at that skin that is still in perfect condition. This is done in       . I used to have the.... The title page is gone..... hmmm. I'll find it, it's in here.

SUE: It's amazing.

ERIC: The demonstration of what we will put in these four cases about Franklin because he did so many impossible things.

SUE: It's hard to choose.

ERIC: Huh?

SUE: It's hard to choose, right?

ERIC: Well, but he is the man that understood the necessity of paper money and remember there were not yet... he had to think all of these things up himself. This is... I'm going to talk on this in July at the Historical Society and I'm going to explain how he showed the same kind of economic thinking that we are using today to stimulate people's ability to make products and sell products and improve their standard of living. That's pretty good for me to enjoy Franklin. Evelyn is going to .... She's got the chair and she's going to dress Franklin up and he's going to give a nice funny talk and one of the mottos that he said if, "if you think money doesn't have value, try to borrow some".

[Laughing]

SUE: That's pretty good. I can't wait to see that. Because I remember Franklin from the last museum.

ERIC: You do?

SUE: I worked at Bi-state at the time and we were in the Ambassador building at the time.

ERIC: You were connected to the Mercantile Bank by a walkway.

SUE: Yes.

END.

